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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,841	09/29/2003	Walter Bernaschek	RD7265USDIV1	2527

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E I DU PONT DE NEMOURS AND COMPANY
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WILMINGTON, DE 19805

EXAMINER

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,841

Applicant(s)

BERNASCHEK, WALTER

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/763,722.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is vague and indefinite because it is unclear whether the limitation to "concave cusps" is intended to limit the apparatus or the product. The Examiner notes that throughout the application "cusp" refers to a shape of the filament formed by a rounded portion of the apparatus. The Examiner suggests reciting the limitation "by concave cusps" as --by a portion concavely rounded relative to the outside of the plate--. For purposes of examination the Examiner has interpreted "concave cusps" as a rounded portion concave to either the outside of inside of the plate.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3 and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hernandez (5,540,994).

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Hernandez teaches a spinneret plate for producing a thermoplastic synthetic polymer filament (Fig 3); the spinneret plate having a cluster of N peripheral slots centered about a central point (Fig 3), each peripheral slot having a pair of slot segments (Fig 3, the two halves of each of #s 19, 20, 21 and 22) joined at a junction point by concave cusps (the junction point is curved, and thus concave relative to the center of the plate), each slot segment in one peripheral slot being confrontationally disposed with a slot segment in another peripheral slot (Fig 3), a rib-forming slot (Fig 3, #s 15, 16, 17 and 18) extending from each junction point toward the central point of the cluster; at least one web-forming slot (Fig 3, #s 23, 24, 25, 26, 27, 28, 29 and 30) extending from each slot segment toward the slot segment with which it is confrontationally disposed; each rib-forming slot extends at least two-thirds of the distance between the junction point and the central point of the cluster (Fig 3); there are three pairs of peripheral slot segments (Fig 3); there are four pairs of peripheral slot segments (Fig 3); each peripheral slot segment is substantially linear over substantially its entire length, but also slightly convexly curved over substantially its entire length (Fig 3).

The Examiner notes that the limitations of claim 1 pertaining to the intended filament produced, namely: "filament having a core portion from which extend N lobes, the core portion having N radially inwardly extending stiffening ribs that cooperate to define at least N hollow regions in the core portion, each hollow region aligning radially with a respective lobe, each lobe having at least one transverse web disposed in the lobe between the tip of the lobe and the hollow region aligned with the lobe" do not further

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limit the structure of the apparatus. Since the openings alone do not dictate the filament produced (as discussed in the specification, the viscosity of the melt also alters shape), the apparatus is only further limited by structural limitations.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hernandez (5,540,994).

Hernandez teaches the apparatus as discussed above.

Hernandez fails to teach a second web-forming slot extending from each slot segment toward the slot segment with which it is confrontationally disposed and fails to teach each rib-forming slot extending less than one-half of the distance between the junction point and the central point of the cluster.

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Changing the size of the rib forming slot of Hernandez such that it extends less than one-half the distance or changing the shape of the web forming slot such that there are two extending from each slot segment toward the confrontationally disposed slot segment can be done for the purpose of altering the size and shape of the final product produced (numerous different sizes and shapes of spinneret openings are known as demonstrated by the prior art listed by the Applicant's IDS).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have changed the size and shape of the rib forming slots and the web-forming slots because a mere change in size of a product produced wherein the change in size is brought upon by a change in degree of the producing structures is obvious, because changing the size of the rib-forming slots would be readily determined by routine experimentation in an effort to produce the optimum results, because wherein the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, and because changing the shape of the web-forming slots would be readily determined by routine experimentation in an effort to produce the optimum results. The Applicant is encouraged to refer to the USPQ First Series Classification Series §51.261 which outlines case law pertaining to changes in size. Particular attention should be paid to *The Murray Company of Texas, INC. v. Continental Gin Company* (CA 5) 120 USPQ 416, which states that "invention cannot inhere in mere increased size or capacity since mere enlargement is not

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invention"; In re Rose (CCPA) 105 USPQ 237 which states that "size of article ordinarily is not matter of invention"; Schaefer, INC. v. Mohawk Cabinet Company, INC. (DC NNY) 118 USPQ 411 which states that "mere change in size, form, or degree is not invention"; and The Ward Machinery Company v. Wm. C. Staley Machinery Corporation (DC Md) 192 USPQ 505 which states that "improvement resulting from change in size, proportion, or degree of element contained in prior art, no matter how desirable or useful, does not constitute patentable invention". The Examiner also suggests review of In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984) and In re Dailey et al 149 USPQ 47.

Response to Arguments

8. Applicant's arguments filed 6/13/05 have been fully considered but they are not persuasive.

The Applicant argues that the prior art fails to teach "concave cusps".

The Examiner disagrees. In addition to the limitation being vague, Hernandez reads on a rounded juncture, concave to the center of the plate.

The Applicant argues that it is not obvious to change the size and shape of the spinneret.

The Examiner disagrees. As stated above, it is obvious that changing the size or shape of a die opening changes the size or shape of a product formed through the opening.

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Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

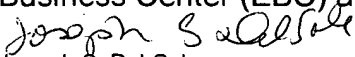
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the Examiner by telephone are unsuccessful, Mr. Duane Smith can be reached at (571) 272-1166. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).


Joseph S. Del Sole
June 23, 2005